BOROUGH OF FOLKESTONE.

REPORT

ON THE

SANITARY CONDITION OF FOLKESTONE

DURING THE YEAR 1904,

AND

Report on Epidemic Diarrhœa during the quarter ended September 30th, 1904,

BY

M. G. YUNGE-BATEMAN,

M.R.C.S., L.S.A., D.P.H. (CANTAB.),

MEDICAL OFFICER OF HEALTH,

To which is appended the Annual Report of the Sanitary Inspector for the Year 1904.

FOLKESTONE :
PRINTED BY D. SUMNER,
1905.

Borough of Folkestone.

REPORT.

Office of Medical Officer of Health,
Folkestone,
February, 1905.

To the Chairman and Members of the Sanitary Committee.

Gentlemen,

I have the honour to submit my Annual Report on the health of the Borough for the year ended December 31st, 1904.

Geological Formation.—The Geological strata visible are of the cretaceous age, with here and there superficial deposits of loam and brick earth. The town is built mainly on the "Folkestone beds," the upper-most member of the lower green sand. These beds are about 90 feet in thickness; they consist of light fawn coloured sands with layers and concretionary masses of siliceous limestone, and are well seen in section in the cliffs on both sides of the harbour. Below these are the "Sandgate beds" visible on the shore where the shingle has been swept away. They consist of dark slate coloured clayey sand, which holds up a good deal of water that has percolated through the sandy beds above. There is consequently a tendency to slip in the case of the latter, and thus to cover and obscure the "Sandgate beds" with the debris. These formations dip gently to the north-east, and about half a mile from the foot of the chalk escarpment behind the town, the gault comes on above the "Folkestone beds." This is a stiff bluish clay, 100 feet thick, forming a belt of stiff land, averaging half a mile in breadth, all along the base of the hills. It appears in section in the cliffs to the east of the harbour overlying the "Folkestone beds" and dipping gradually till it reaches sea level in East Wear Bay beyond Copt Point. It eventually disappears under the "chloritic marl" which forms the base of the chalk. This marl is full of dark green grains of glauconite, and was formerly considered to be a local representative of the upper green sand. Above this comes the chalk escarpment which is the eastern extremity of the North Downs. In the immediate neighbourhood only the lower and middle divisions of the formation are present.

Vital Statistics.—During the year the total number of births registered was as follows :

Males	357
Females	342
Total ...	699

This gives a birth rate of 20·7 per 1000 for the estimated population of 33,700. This is the lowest birth rate recorded during the past twelve years.

The total number of deaths registered in the District was 395, giving a gross death rate of 11·7 per 1000.

Deaths among non-residents occurring in Public Institutions in the District numbered 14. Deaths of residents occurring in Public Institutions beyond the District numbered 30.

The corrected death rate is therefore 12·6 per 1000.

Infant Mortality.—The numbered of deaths registered under one year of age was 109, of this total 16 were premature birth.

The Infant Mortality Rate is 143·0. This is considerably above the average for the 10 year period, which is 136 (vide table I) and is only slightly below that for England and Wales which is 146. Thirty eight deaths were due to Diarrhœa alone. I shall refer to these later on in a special report. In my last report I referred to the ignorance and carelessness displayed in the feeding of young infants, whereby their nutrition is gravely impaired, and to the necessity for educating the general public by the distribution of pamphlets giving brief instructions how an infant ought to be fed. Such pamphlets have been printed and are now being circulated, through the medium of district nurses and visitors, who are asked to explain the directions given in the pamphlets, and as far as possible see they are carried out.

Zymotic Diseases.—The seven principal Zymotic Diseases were responsible for 62 deaths.

The following table shows the deaths caused by these diseases during the past 10 years.

		1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Small Pox						nil.					
Measles		2	23	1	0	7	0	8	3	12	0
Diphtheria (including Membranous Croup)		7	7	8	2	1	6	5	6	0	2
Whooping Cough		3	1	2	10	7	0	5	13	13	12
Fever.	Typhus					nil.					
	Simple, continued ...					nil.					
	Typhoid	0	4	4	8	16	5	3	6	2	1
Diarrhœa		23	9	31	53	55	31	22	22	9	47
Scarlet Fever		1	1	2	0	0	0	0	1	3	1
Totals		34	45	48	73	86	42	43	51	39	63

Folkestone Urban District.—Table I.

FOR WHOLE DISTRICT.

Vital Statistics during 1904 and previous years.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District.	
				Under 1 year of age.		At all ages.						
		Number.	*Rate.	Number.	Rate per 1000 Births registered.	Number.	*Rate.				Number.	*Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1894	25,800	623	24·1	66	105·9	363	14·0	54	42	24	345	13·3
1895	26,600	658	24·7	99	150·0	402	15·1	23	36	18	385	14·4
1896	26,900	643	23·9	79	122·0	338	12·5	37	39	24	323	12·0
1897	27,600	667	24·1	101	151·0	423	15·1	45	42	19	400	14·4
1898	28,250	662	23·4	118	178·2	440	15·5	22	32	21	429	15·1
1899	29,600	744	25·1	114	153·2	446	15·0	34	44	25	427	14·4
1900	29,900	698	23·3	82	117·4	406	13·5	53	46	25	385	12·8
1901	30,490	705	23·1	113	160·0	443	14·5	42	16	24	451	14·7
1902	31,300	727	23·2	83	114·1	394	12·6	61	12	17	399	12·7
1903	32,150	735	22·8	84	114·2	384	11·9	21	15	23	392	12·1
Averages for years 1894-1903.	28,859	686	23·7	93	136·6	403	13·9	39	32	22	393	13·5
1904	33,700	699	20·7	109	143·0	395	11·7	54	14	30	411	12·6

*Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

Note.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made should be given on the back of this Table.

Area of District in acres (exclusive of area covered by water) 2,321

Total population at all ages 30,379		At Census of 1901.
Number of inhabited houses 5,379		
Average number of persons per house .... 5·6		

I. Institutions within the District receiving sick and infirm persons from outside the district.	II. Institutions outside the District receiving sick and infirm persons from the District.	III. Other Institutions, the deaths in which have been distributed among the several localities in the District.
Victoria Hospital. Sanatorium. St. Andrew's Convalescent Home.	Elham Union.	
Is the Union Workhouse within the District ? No.		

Folkestone Urban District.—Table II.

Vital Statistics of separate Localities in 1904 and previous years.

Names of Localities.	1. WEST WARD.				2. NORTH WARD.				3. EAST WARD.			
YEAR.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages	Deaths under One Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages	Deaths under One Year.	Population estimated to middle of each year.	Births registered.	Deaths at all Ages	Deaths under One Year.
	a.	*b.*	*c.*	*d.*	*a.*	*b.*	*c.*	*d.*	*a.*	*b.*	*c.*	*d.*
1894......												
1895......												
1896......												
1897......												
1898......												
1899.....												
1900.....												
1901......	11,300	122	135	14	10,460	336	179	62	8,730	247	137	37
1902......	11,470	149	112	14	11,030	336	157	41	8,800	242	130	28
1903......	11,560	116	111	14	12,140	375	157	42	8,450	244	124	28
Averages of Years 1894 to 1903......												
1904......	11,650	117	108	9	12,911	339	169	51	9,139	243	134	49

Notes.—(*a*) The separate localities adopted for this table should be areas of which the populations are obtainable from the census returns, such as wards, parishes or groups of parishes, or registration sub-districts. Block 1 may, if desired, be used for the whole district; and blocks 2, 3, &c., for the several localities. In small districts without recognised divisions of known population this Table need not be filled up.

(*b*) Deaths of residents occurring in public institutions beyond the district are to be included in sub-columns *c* of this table, and those of non residents registered in public institutions in the district excluded. (See note on Table 1 as to meaning of terms " resident " and " non-resident.")

(*c*) Deaths of residents occurring in public institutions, whether within or without the district, are to be allotted to the respective localities according to the addresses of the deceased.

(*d*) Care should be taken that the gross totals of the several columns in this Table respectively equal the corresponding totals for the whole districts in Tables I and IV; thus, the totals of sub-columns *a*, *b*, and *c* should agree with the figures for the year in the columns 2, 3, and 12, respectively, of Table I: the gross total of the sub-columns *c* should agree with the total of column 2 in Table IV, and the gross total of sub-columns *d* with the total of column 3 in Table IV.

Folkestone Urban District.—Table III.

Cases of Infectious Disease notified during the Year 1904.

Notifiable Disease.	Cases Notified in Whole District.							Total cases notified in each Locality.			No. of cases removed to Hospital from each Locality.		
	At all Ages.	At Ages†—Years.						1 West Ward	2 North Ward	3 East Ward	1 West Ward	2 North Ward	3 East Ward
		Under 1.	1 to 5	5 to 15	15 to 25.	25 to 65.	65 and upwards.						
Small Pox													H
Cholera													
Diphtheria	26		9	13	3	1		13	9	4	13	7	3
Membranous Croup..													
Erysipelas	15		1			13	1	3	7	5			
Scarlet fever ...	46		10	28	3	5		6	21	19	5	19	12
Typhus fever ...													
Enteric fever ...	7			2	2	3		2	4	1	1	2	
Relapsing fever ...													
Continued fever ...													
Puerperal fever ...	2					2			2				
Plague													
*													
Totals ...	96		20	43	8	24	1	24	43	29	19	28	15

Notes.—The localities adopted for this table should he the same as those in Tables II and IV.

State in space below the name of the isolation hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent. Mark (H) the locality in which it is situated, or if not within the district, state where it is situated, and in what district. Mark (W) the locality in which a workhouse is situated.

* This space may be used for record of other disease the notification (compulsory or voluntary) of which is in force in the district.

† These age columns for notifications should be filled up in all cases where the Medical Officer of Health, by inquiry or otherwise, has obtained the necessary information.

Isolation Hospital—Sanatorium, situated in East Ward.

Folkestone Urban District.—Table IV.

Causes of, and Ages at, Death during Year 1904.

(*See* Notes at Back.)

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Deaths at all ages of "Residents" belonging to Localities, whether occurring in or beyond the district.			Total Deaths whether of Residents or non-Residents in Public Institutions in the District.
1	All ages. 2	Under 1 year. 3	1 and under 5. 4	5 and under 15 5	15 and under 25 6	25 and under 65 7	65 and upwards. 8	West Ward. 9	North Ward. 10	East Ward. 11	12
Small-pox											
Measles											
Scarlet-fever	1		1						1		1
Whooping-cough	12	7	5					1	8	3	
Diphtheria and membranous croup...	1		2						1	1	2
Croup											
Fever: Typhus											
Fever: Enteric	1				1				1		1
Fever: Other continued ...											
Epidemic influenza	1					1				1	
Cholera											
Plague											
Diarrhœa. (*See* notes at back.) ...	47	38	6			2		2	26	19	8
Enteritis. (*See* notes at back.) ...	3	1		1			1	2	1		
Puerperal Fever. (*See* notes at back.)	1					1			1		1
Erysipelas											
Other sceptic diseases	4	1				3		1	3		2
Phthisis (Pulmonary Tuberculosis)	32		1	1	11	18	1	8	11	13	4
Other tubercular diseases ...	14	3	5	2	3	1		4	6	4	3
Cancer, malignant disease. (*See* notes at back.)	25				1	11	13	6	10	9	5
Bronchitis	26	7	1			3	15	7	4	15	3
Pneumonia	11	3	3			3	2	2	4	5	3
Pleurisy	1						1			1	
Other diseases of Respiratory organs											
Alcoholism Cirrhosis of liver	17				1	11	5	9	4	4	1
Venereal diseases											
Premature birth	16	16							11	5	
Diseases and accidents of parturition	3	1		1		1			2	1	1
Heart diseases	33			2	1	15	15	18	11	4	4
Accidents	11	2	1	2		3	3	1	6	4	5
Suicides	5				1	2	2	1	2	2	3
All other causes	146	30	2	2	7	43	61	46	56	48	37
All causes	411	109	27	12	26	118	119	108	169	134	84

NOTES.—(*a*) In this Table all deaths of "Residents" occurring in public institutions, whether within or without the district, are to be included with the other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-11, to be included among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of Non-residents" occurring in public institutions in the district are in like manner to be *excluded* from columns 2-8 and 9-11 of this Table.

(*b*) *See* notes on Table I. as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" to be taken into account for the purposes of these Tables. The "Localities" should be the same as those in Tables II. and III.

(*c*) All deaths occurring in public institutions situated within the district, whether of "Residents" or of Non-residents," are, in addition to being dealt with as in note (*a*), to be entered in the last column of this Table. The total number in this column should equal the figures for the year in column 9, Table I.

(*d*) The total deaths in the several "Localities" in columns 9-11 of this Table should equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of this Table should equal the gross total of columns 9-11, and the figures for the year in column 12 of Table I.

(*e*) Under the heading of "Diarrhœa" are to be included deaths certified as from diarrhœa, alone or in combination with some other cause of ill-defined nature ; and also deaths certified as from

Epidemic enteritis ;
Zymotic enteritis ;
Epidemic diarrhœa. Summer diarrhœa ;
Dysentery and dysenteric diarrhœa ;
Choleraic diarrhœa, cholera, cholera nostras
(in the absence of Asiatic cholera).

Under the heading of "Enteritis" are to be included those certified as from Gastroenteritis, Muco-enteritis, and Gastric catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, especially those of infants, under the specific term "Diarrhœa." Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.

Under the headings of "Cancer" and Puerperal fever" should be included all registered deaths from causes comprised within these general terms.

In recording the facts under the various headings of Tables I., II., III., and IV., attention has been given to the notes on the Tables.

M. G. YUNGE-BATEMAN,

February 16th, 1905.

Medical Officer of Health.

The Zymotic death rate the 10 years is as follows :

1895	1·3
1896	1·6
1897	1·6
1898	2·5
1899	2·9
1900	1·4
1901	1·4
1902	1·6
1903	1·2
1904	1·8

Scarlet Fever.—There have been forty-six notifications of this disease, one of which proved fatal.

The distribution of cases over the year was as follows :—

Ist quarter	7
2nd quarter	4
3rd quarter	10
4th quarter	25
	46

Of this number thirty-six were isolated in the Sanatorium, or 78 per cent. of the cases notified. The cases during the first nine months were of a mild type, and of the 21 that occurred during those months two were distinctly imported. The majority of the cases notified during the last quarter occurred in November, 17 being notified then, and two and six respectively in October and December. These cases were scattered broadcast about the North and East Wards, twelve coming from each of these wards, the remaining one from the West Ward attended a school in the East Ward. I could trace no definite connection between these cases, but I subsequently found out there had been several cases of sore throats among the school children of an indefinite character that in all probability were of scarlatinal origin, for I found in two or three instances cases of sore throats among other members of families in which definite symptoms of scarlet fever were evident. This was notable in the family of the case that proved fatal, for previous to the notification of this case several other members of the family had suffered with sore throats, but in no case could evidence of a rash be obtained, nor was it until the infant developed a typical rash, that medical advice was sought, this case was at once removed to the Sanatorium where it died in a few days from Septic Meningitis. On examination none of the other members who had had sore throats showed any symptoms of desquamation, but two other families became infected by contact with them. Of the cases notified in December one if not two, were certainly infected by a child who had been nursed at home, and being still infectious after discharge.

Diphtheria.—There were 26 notifications of this disease, two of which proved fatal. The distribution of cases over the year was as follows :—

1st quarter	6
2nd ,, ...	8
3rd ,, ...	8
4th ,, ...	4
	26

twenty-three cases were removed to the Sanatorium.

The chief incidence fell upon the West Ward, thirteen cases being notified from that division. Four cases were distinctly imported ; and the remaining nine were due directly or indirectly to infection from a case that had been nursed at home, and in whom the Kleb's Loeffler Bacillus was found two months after it was supposed to be free. All these cases occurred in the same street and had been in contact with the above mentioned child.

No return cases occurred from those which had been treated in the Sanatorium. It has been the custom during the past year, not to discharge patients from that institution until three consecutive negative results have been obtained, from swabs taken from the throat and nose. The reduction in the number of notifications leads one to conclude that the money paid for bacteriological examinations is profitably spent.

In all cases notified I have examined and had bacteriological examinations made of such contacts as were deemed necessary. Children who have been in contact, have also been excluded from school attendance until certified free.

Typhoid Fever.—There have been only seven notifications during the year, one case proved fatal :

1st quarter	3
2nd ,, ...	2
3rd ,, ...	2
4th ,, ...	0
	7

Three cases were isolated at the Sanatorium. Two others were admitted to the Victoria Hospital suffering from ill defined diseases which subsequently proved to be Typhoid fever

The cases occurring in the first quarter where all supplied by the same milkman. The rain water tank at his dairy, situated without the Borough, was found defective and liable to pollution, and was consequently closed, and the Folkestone Waterworks Company's supply was used. No further cases occurred in this man's round.

Whooping Cough.—This disease was again prevalent during the first half of the year and caused twelve deaths.

In consequence of this disease and also an outbreak of Measles among the children attending the Infants' Department of the Christ Church Schools, this department was closed for a period of four weeks from February 29th.

These diseases are the two chiefly responsible for the closure of schools. Not being notifiable they have generally made considerable headway amongst the children before they come to our notice.

The remarks I made on this subject in my last report, I again submit for your consideration.

Phthisis.—Under the headings of Phthisis and "other Tubercular Diseases" forty-six deaths were registered giving a death rate 1·3 per 1000.

The same precautions have been taken as in recent years, by offering disinfection after removal or death at all houses when information has been given. Milk has been bacteriologically examined, fifty-six samples having been taken for that purpose. This year there was no necessity to take action, the samples all being satisfactory.

It is satisfactory to note also that the public generally are taking a more intelligent interest, and I hear it is the rule now for persons suffering from Phthisis to sleep with open windows, a thing almost unknown in the past.

Cancer.—The deaths returned under this disease numbered twenty-five, giving a death rate of ·74 per 1000.

Housing of the Working Classes.—The eleven houses referred to in my last year's report, represented as being unfit for human habitation, as well as an additional one in Radnor

Street, have been dealt with during the year, the Sanitary Committee visited the premises and ordered their closure, but when taken into court the magistrates decided against their being closed.

This is much to be regretted, considering the importance now being attached to the necessity for providing healthy dwellings and surroundings in order to cope with the evil of physical deterioration.

Representations have been made as regards four cottages at the Folly, stating they are unfit for human habitation.

Bakehouses.—These have been inspected from time to time. The total number is thirty-six, in some I found no provision is made for hanging up the hats and clothes of the employées, the bins and troughs also were without rollers in many instances. These ommissions are not conducive to cleanliness in the bakehouses. The owners however stated their willingness to adopt my recommendations.

Removal and Disposal of House Refuse.—This work is carried out by the Corporation, The refuse, both house and trade, is collected in covered carts from all premises at least three times a week, and from the busiest parts of the town and large hotels more frequently. Since July all the refuse has been disposed of in the Destructor, which has been completed and been in operation from the middle of that month. Soon after it started, complaints were forthcoming of a nusiance arising from effluvia stated to come from the chimney. It was found on one occasion that refuse was being treated before a proper head of steam had been attained. This was due to inexperience, and since this has been attended to, no further complaints have been made.

Offensive Trades.—I found that fat and bone boiling was being carried on in premises adjacent to the Destructor, which gave rise to a serious nuisance, the process being carried on by very primitive methods. I reported on the condition of these premises, and the nuisance was at once abated, by prohibition of continuance of this trade.

Water Supply.—The whole town, with the exception of a very few houses, is supplied by the Folkestone Water Works Company, which derives its supply mainly from a deep well in the chalk, situated at Standen in the Alkham Valley to the N.E. of the Town. This will yield on the average 800,000 gallons per diem. There is also a deep well in the lower green sand at the Shearway works with an average yield of 500,000 gallons per diem and a further 300,000 gallons are collected from a tunnel in the chalk behind the reservoirs.

A third deep well exists in the chalk formation at Lydden, the yield from which is estimated will be 1,000,000 gallons per diem. So far this well has not been drawn upon, but the mains are laid for future use.

The capacity of the reservoirs, which are five in number, and are concreted throughout, is 20,000,000 gallons.

The quality of the water maintains its standard of purity and I have received no complaints as regards quality or quantity. I enclose copies of the chemical and bacteriological analyses made by Mr. Sidney Harvey, the Borough Analyst.

COPY.

Canterbury,
23rd, June, 1904.

Water Analysis.—Folio 13217.
The Folkestone Local Board.
Sample marked as below.
Received 20th June, 1904.

Description or Number of Sample.	" No. 1. Tap off Main 15, Castle Hill Avenue."
Appearance	Clear.
Colour	Green—Blue.
Smell	None.
Chlorine in Chlorides	1·89.
Phosphoric Acid in Phospates	None.
Nitrogen in Nitrates	0·28.
Ammonia	None.
Albuminoid Ammonia	0·0011.
Oxygen absorbed in 15 minutes	Trace only.
Oxygen absorbed in 4 hours	0·036.
Hardness before boiling (total)	17·6.
Hardness after boiling (permanent)	2·7.
Total Solid Matter	23·11.
Microscopical Examination of Deposit	Very slight and unimportant.

Remarks.—The above results are satisfactory throughout and indicate water organically pure and free from sewage percolation.

The Microscopical Examination calls for no adverse remarks.

(Sd.) SIDNEY HARVEY.
Public Analyst, Borough of Folkestone.

COPY.

Canterbury,
23rd June, 1904.

Report Folio 13213.

The Folkestone Local Board.

Bacteriological Examination of the Public Water Supply, Folkestone.

I herewith forward the results of my examination of a sample of water received from Dr. M. G. Yunge-Bateman, the Medical

Officer of Health, on the afternoon of 20th June, and which sample was labelled as follows:—"No. 2. 20th June, 1904, 10.45 a.m. from Tap off Main, 15, Castle Hill Avenue."

I have submitted the water to careful Bacteriological Examination and find the character of the water as judged by these means is quite satisfactory.

I obtained after three days incubation, 42 micro-organisms per cubic centimetre (being the average of several closely agreeing estimations) of which more than ninety per cent. were minute and developed but slightly. The colonies from the above micro-organisms varied but little in character and were such as are ordinarily observed in the purest water and I am satisfied that they ought not to be regarded with the least suspicion. Careful search was made for pathogenic organisms with absolutely negative results.

The above mentioned cultures were started a very few hours after the sample was actually taken.

(Sd.) SIDNEY HARVEY,
Public Analyst Borough of Folkestone.

Sewer and Drainage Works.—The following sewers have been examined and found defective:

- Alexandra Street.
- Bouverie Road West (Castle Hill Avenue to Earl's Avenue section.)
- Castle Hill Avenue, (Shorncliffe Road to Sandgate Road section)
- Rossendale Road.
- Black Bull Road.
- Walton Road.

All these require relaying. A certain sum should be allowed annually in the estimates to enable these and other necessary works to be carried out.

The number of houses redrained this year is 115. The necessity arose on account of defects in the pipes and joints, want of disconnecting syphon traps, etc. During the past five years 952 houses have been thus redrained.

Nothing definite has yet been decided as regards the sewer outfall, although I believe it has been decided, as a temporary measure, to combine the present high and low level outfalls into one, and the point of delivery of the junction of the two, to be brought somewhat nearer to the mouth of the harbour.

Sanitary Administration.—The following Adoptive Acts and Bye-Laws are in force in the District :—

The Infectious Diseases Prevention Act, adopted in 1890.

Public Health Acts Amendment Act, adopted in 1890.

Infectious Diseases Notification Act, adopted in 1890.

Bye-Laws with respects to New Streets and Buildings, allowed in 1880.

Bye-Laws with respect to New Streets and Buildings allowed in 1858.

Bye-Laws with respect to Common Lodging Houses, allowed in 1889.

During the year the following have come into force.

A Bye-Law under the Public Health Acts Amendment Act, 1890, *re* Water Closets.

Bye-Laws with respect to Slaughter Houses replacing the Bye-Laws made in 1858 which were defective and antiquated.

Regulations under the Dairies, Cowsheds and Milkshops Order of 1885.

House to House Inspection.—On account of pressure of other work there has been less time devoted to above, but the undermentioned streets were visited and considerable improvement has been made in their sanitary condition, viz. :

Warren Road.
East Cliff, and upper portion of High Street.

Factory and Workshop Act, 1901.—Enclosed is a table provided by request of the Secretary of State, showing the number of inspections, defects found and other matter dealing with the working of this Act.

Infectious Hospitals.

The Smallpox Hospital, situated at the foot of the hills on the Dover Road, about $\frac{1}{3}$ of a mile N.E. of the Town, is a wooden structure, having two wards, and capable of accommodating four patients and two nurses. There is also sufficient space for extension if necessary. There is however no fencing around the ground. This wouldtbe necessary in the case of an epidemic. No cases have been admitted during the year.

Sanatorium.—The admissions to this Hospital during the year were sixty-six, which with five patients remaining under treatment from 1902 makes the total seventy-one.

The cases admitted during the year were as follows :

Scarlet Fever	36
Diphtheria	24
Typhoid Fever	3
Measles	1
Doubtful	2
	66

Of this number two were admitted from outside the district, viz :

	Scarlet Fever.	Diphtheria.
Sandgate ...	1	0
Hawkinge ...	0	1
	1	1

The following deaths occurred among the patients admitted :

Scarlet Fever	1
Diphtheria	2
Typhoid Fever	1
Doubtful	1
	5

One case of Diphtheria died within twenty-four hours after admission.

The death entered as doubtful was admitted for Typhoid Fever, but it was eventually proved to be a case of Meningitis.

Cases under treatment December 31st, 1904.

Scarlet Fever	11

There has been no instance of a patient contracting another disease, whilst in the Hospital ; nor could I attribute infection due to a discharged patient.

Appended is a report on the prevalence of Epidemic Diarrhoea during the 3rd quarter of the year.

I also enclose report of Sanitary Inspector.

I remain, Gentlemen,
Yours Obediently,
M. G. YUNGE-BATEMAN,
M.R.C.S., L.S.A., D.P.H. (Camb.)
Medical Officer of Health.

Folkestone Meteorological Chart, 1904.

MONTHS.	Mean Temp.	Absolute		Mean Max.	Mean Min.	Mean Daily Range	Sunshine per *Jordan's recorder*		Rain Fall	Relative Humidity.	No. of Rainy Days.	No. of Sunless Days.
		Max.	Min.				hrs.	min.				
January ...	39·0	49·9	25·5	43·2	34·9	8·3	47	0	3·50	94	21	16
February ...	39·7	51·1	26·5	43·7	35·8	7·9	66	10	2·31	90	20	6
March ...	40·5	53·9	26·5	45·2	35·9	9·3	130	25	1·63	84	12	6
April ...	48·7	62·0	35·0	55·1	42·3	12·8	181	55	1·13	79	11	3
May ...	52·4	69·3	35·8	58·2	46·6	11·6	168	0	1·98	83	16	4
June ...	56·5	68·4	46·5	62·7	50·4	12·3	249	30	1·03	75	9	—
July ...	63·9	78·6	50·0	70·9	57·0	13·9	312	30	·96	74	6	—
August ...	62·0	81·9	47·5	68·7	55·4	13·3	207	0	1·94	70	11	1
September ...	56·9	68·8	44·0	62·3	51·6	10·7	190	30	1·24	79	12	1
October ...	52·8	64·0	37·0	57·0	48·7	8·3	112	30	2·32	83	12	7
November ...	44·1	59·1	26·5	49·0	39·3	9·7	91	35	1·18	86	9	7
December ...	43·4	54·1	28·0	47·8	39·0	8·8	43	30	3·09	90	18	15

Mean Temperature for year, 50·0°
„ Daily Maximum Temp. 55·3°
„ „ Minimum „ 44·7°
„ Daily Range ... 10·5°
„ Relative Humidity 82°

Total Rainfall ... 22·31 inches
„ Sunshine 1800 hrs. 35 mins.
No. of Rainy Days ... 157
„ Sunless „ ... 66

Folkestone Urban District.—Table V.

Factories, Workshops, Laundries, Workplaces and Homework.

I.—INSPECTION.

Including Inpections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories ... ... (Including Factory Laundries.)	40	2	
Workshops ... ... (Including Workshop Laundries.)	184	10	
Workplaces	34	—	
Homeworkers' Premises	46	—	
Total	274	12	

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions
	Found.	Remedied.	Referred to H.M. Inspector.	
Nuisances under the Public Health Acts :—				
Want of cleanliness	5	5		
Want of Ventilation	—	—		
Overcrowding	3	3		
Want of drainage of floors	2	2		
Other nuisances...	1	1		
Sanitary accommodations { insufficient	4	4		
Sanitary accommodations { unsuitable or defective ...	6	6		
Sanitary accommodations { not separate for sexes ...	1	1		
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground bakehouse (S. 101)	1	1		
Total ...	23	23		

3.—OTHER MATTERS.

Class.	Number.	
Matters notified to H.M. Inspectors of Factories :—		
Failure to affix Abstract of the Factory and Workshop Act (S. 133) ...	4	
Underground Bakehouses (S. 101) :—		
In use during 1903	8	
Certificates granted { in 1903	1	
Certificates granted { in 1904	2	
In use at the end of 1904	3	
Homework :—	Number of	
List of Outworkers (S. 107) :—	Lists.	Outworkers.
Lists received	67	67
Addresses of outworkers { forwarded to other Authorities	Nil.	Nil.
Addresses of outworkers { received from other Authorities ...	1	1
Workshops on the Register (S. 131) at the end of 1904	203	

M. G. YUNGE BATEMAN,

February 14th, 1905.

Report on Epidemic Diarrhœa during the quarter ended September 30th, 1904.

Of forty-seven deaths registered during the whole year no less than forty-three occurred in the third quarter of the year. The remaining four cases were distributed as follows :—

Three in second quarter and one in fourth quarter.

As this disease is not notifiable in the Borough reliable statistics are not available to enable one to arrive at the total number of cases that occurred. I have, however, collected from various sources the details of forty-six cases that did not prove fatal, but this must necessarily be a very small percentage of those that actually occurred.

The total number eighty-nine will be dealt with for the purposes of this report.

The following table will show the prevalence or otherwise of diarrhœa during the past fifteen years :—

Years.	Deaths.	Rainfall in 3rd Quarter.
1890	3	8·02
1891	4	7·02
1892	14	8·90
1893	20	9·15
1894	3	9·78
1895	23	5·68
1896	9	11·44
1897	31	6·62
1898	53	4·05

1899	55	4·54
1900	31	4·14
1901	22	4·00
1902	22	6·25
1903	9	10·75
1904	47	4·14

From this it will be seen that Diarrhœa is more or less endemic and has been more in evidence during the last eight years. I have recorded on the same table the rainfall for the third quarter of each year and to this I will refer later on.

Distribution of the Disease.—Taking the three wards, the number of cases in each was as follows :—

North Ward	60
East Ward	25
West Ward	4
	89

Reference to the Spot Map will give this information more in detail.

Geological Formation.—The Geological Formation in each ward is also given.

In the North Ward, the district N.E. of the Pent Stream is, roughly speaking, gault, with gravel drift superimposed of varying thickness. The district to the S.W. of the stream is the lower-green sand (Folkestone beds), with varying thickness of brick earth above.

In the East Ward, the Folkestone beds form the western half, the gault commencing just to the east of the Harbour and forming the chief feature of the northern and eastern portions.

The West Ward, is all on "Folkestone Beds" having a varying thickness of brick earth towards the Railway Embankment.

Age Distribution.—

AGE.		TOTAL CASES.		DEATHS.
Under 1	..	52	...	37
1—2 years	...	21	...	5
2—3 „	...	8	...	0
3—4 „	...	2	...	0
4—5 „	...	0	...	0
5—6 „	...	1	...	1
25—65 „	...	1	..	0
Doubtful	...	4	...	—
		89		43

It will be seen the heaviest mortality, as might be conjectured, was amongst infants under one year of age. The next age period, 1—2 years, accounting for the remainder with the exception of one who died at the age of five.

Methods of Feeding.—Those children who had milk as their chief form of diet were as under :—

Bottle-fed	...	...	73
Breast-fed	...	...	6
Both	...	...	5

In the Bottle-fed children the milk supplied was cows, fresh or condensed. The source from which it was derived was variable so that it was impossible to attach suspicion to any one special supply.

Water Supply.—This in all cases was derived from the Folkestone Waterworks Company. Besides supplying the whole Borough, they supply Sandgate, Cheriton and Shorncliffe Camp and I am not aware these places suffered to any material extent from this disease. In Sandgate I am informed no deaths from diarrhœa were registered.

Class of Houses Affected.—The houses in the North and East Wards are of the small working class type. Of the four affected in the West Ward, where the houses generally are of a superior residental type, one was a small lodging-house, one a three roomed dwelling over a stable. The other two being of the same class as those in the other wards.

In fact the incidence was mainly among the class of houses which have a kitchen-dwelling room. As may be readily understood there is no accommodation for the storage of milk in this class of dwelling. The milk on delivery is put into a jug and generally left to stand on the table or it may be put into the cupboard. The atmosphere of these rooms is hot and close and certainly not calculated to improve milk kept for any length of time in that atmosphere. Various articles of food in various stages of demolition are in close proximity and flies frequently abound. It is therefore easy for the milk to become tainted, before being consumed. Amongst the bottle fed children, the old fashioned long tubed bottle is almost invariably in use, as it requires less trouble to feed the child who is generally left in its cot with the bottle beside it. The general surroundings of these houses consist of a small back-yard partly paved, partly garden, more often than not neglected, and used as a receptacle for lumber, etc., requiring constant attention from the Sanitary Inspector's Department. On to this the kitchen window and door generally open. If the tenants are clean and respectable, these back-yards are well kept; but they are the very reverse when the houses are occupied by those who are careless and dirty. The number of cases under consideration are not sufficient to enable one to say if overcrowding comes into play to any extent, but I should not be astonished to find that densely populated areas were more affected, if the total number of cases occurring could be known. This would only be found out by adding diarrhœa to the list of notifiable diseases. There did not appear to be any special incidence on a particular line of sewer, nor could I find that the household drains were particularly at fault.

Flies.—These appear to have been a source of nuisance during the months under consideration and I notice a fairly heavy incidence among houses in the neighbourhood of allotment gardens and areas of waste ground where there is always a quantity of manure or decaying vegetable matter, forming excellent breeding grounds for these pests.

Meteorological Conditions.—No data are available for the subsoil temperature at 4ft. Enclosed is a chart giving the total number of cases under consideration, and the approximate time of their occurrence for each day of the month during the quarter. The mean temperature is also shewn, as well as the rainfall. The maximum temperature is also shewn for each month.

It will be seen that the first death occurred on July 27th, the second on the 30th. From August 1st till 7th there was a marked increase, and from the 8th till the 20th the cases and deaths appear to have reached their highest level. During this period, the rainfall, although fairly frequent, had been small and insignificant. Then, on the morning of the 22nd, the large amount of ·79ins. was registered for the previous 24 hours, followed by ·12 on the 23rd. Immediately after this the fresh cases drop to three, and the deaths to twelve during the rest of the period under consideration. There was a further large quantity registered on the 30th and 31st of ·8ins. The outbreak, in fact, appears to have suddenly sprung into existence during the last week in July, and to have developed with explosive force and persisted with slight rises and falls till the 21st August. It then suddenly dropped, and with only three fresh cases, practically disappeared by the middle of September. This is borne out by the statement made by many medical men, that a great many cases occurred simultaneously, and after periods of declines and increases, suddenly ceased. It appears as though this was caused by the effect of a sudden and heavy down-pour of rain, which resulted in a thorough cleansing of the atmosphere, streets, alleys, courtyards and ground generally. It also would cause a lowering of the temperature, and have a beneficial effect in destroying flies.

I have examined the deaths from Diarrhœa and the rainfall for the third quarter for a period covering the past 15 years, and the figures are embodied in Diagram II. It will be found that the number of deaths from Diarrhœa are generally in inverse ratio to the amount of rainfall, which certainly tends to confirm the above opinion.

Precautions.—In my report for 1903 I drew attention to the analogy between that year and 1896, in that with 9 deaths from diarrhœa, the rainfall was about 11ins. for the 3rd quarter in each year, and pointed out the necessity for flushing sewers, surfaces of streets, alleys and courtyards, paying attention also to frequent scavenging both in streets and from house to house.

I again drew your attention to this in a report on June 27th, 1904, and also circulated pamphlets on precautions to be taken, (a copy of which is annexed), through the agency of district visitors and nurses.

OFFICE OF MEDICAL OFFICER OF HEALTH,
FOLKESTONE,
August, 1904.

Suggestions by the Medical Officer of Health for the Prevention of "Summer-Diarrhœa."

"Summer-Diarrhœa" occurs during the months of July, August and September, and is most common among bottle fed-infants.

The causes are found to be due to :—

1. Milk, cows' or condensed, that has been improperly stored in the houses of the consumers.

2. Improper foods that are unsuited to an infant's digestion, such as bread, biscuits, cheese, potatoes, and various patent foods given at too early a period of the infant's life.

Milk should be stored on delivery in an earthenware pan, covered with a piece of clean muslin, in as cool and clean a place as possible, away from any possible source of pollution. It should always be boiled and kept boiling for 10 minutes. It is then ready for mixing in the feeding bottle.

Only feeding bottles without tubes should be used, and these must be kept scrupulously clean.

The natural food of the infant for the first nine months of its life is milk, and no other food should be given it during that period, except by the orders of a doctor.

Send for a doctor at the first signs of diarrhœa.

Keep down flies by general cleanliness throughout the house.

Although no definite conclusion has been arrived at as regards the origin of the disease, it is sufficiently clear how important it is to adopt measures as similar as possible to those provided by nature. It is not sufficient simply to sprinkle the dust. What is wanted is a good flushing, periodically carried out, in dry summers, strict attention to cleansing and scavenging, removal of all refuse, animal or vegetable, in the immediate neighbourhood of dwellings. Manure heaps in allotment gardens, where these are near dwellings should be dug in at once, and it would be still more desirable if these gardens were at a greater distance from houses than they are at present.

Epidemic Diarrhœa should be added to the list of notifiable Diseases, even if only for statistical purposes.

Sanitary and Building Inspector's Office,
Folkestone.

To His Worship the Mayor and Members of the
Corporation of the Borough of Folkestone.

Gentlemen,

I beg to submit to you my Fifteenth Annual Report for the year ended December 31st, 1904, which will show a summary of the work carried out by my department in the abatement and suppression of nuisances under the various Public Health Acts, and other duties imposed by the Factory and Workshop Act, 1901, and the Sale of Food and Drugs Acts.

A continued systematic house to house inspection has been carried out, partly in conjunction with the Medical Officer of Health. In certain streets of recent construction, a very small number of minor sanitary defects were discovered, which were remedied on verbal request, and it was only in streets in the older portion of the Borough where it was found necessary to serve written notices, where nuisances of a more serious character were discovered.

As the Sanitary Committee has ordered me to procure the abatement of nuisances as far as possible by personal interview, letter or intimation notices, I have carried out this system which has resulted in a large amount of sanitary improvement being effected, without the delay of having to go through the process of reporting, and serving legal notices. It is satisfactory to note that it has not been necessary to take any legal proceedings for the abatement of nuisances.

There have been 787 separate nuisances or sanitary defects discovered during the past year, which is an increase on the number discovered, during the previous year, of these 731 are abated, leaving fifty-six still under observation. These will soon be remedied, as at this date a large amount of sanitary work is in hand. These nuisances involved the preparation of 541 notices, and the actual service of 289. It was necessary to make 386 primary inspections, and 1463 secondary inspections of the sanitary work in progress, to ensure that the work was properly carried out.

There has been a total of 104 houses, totally redrained during the past year, and the drains tested by water test on completion ; and a higher standard of sanitary work has been maintained since the system has been adopted by testing the drains by water test.

There have been eleven houses redrained on the combined system, and proceedings have been taken under section 41 of the Public Health Act, 1875, and section 19 of the Public Health Acts Amendment Act, 1890. By working under these sections the expenses incurred by the Corporation in reconstructing these drains, have been recovered from the respective owners where the owners did not carry out the work themselves. I am glad to report that it has not been necessary to take any legal proceedings under these sections during the past year.

The sanitary conveniences of the Public Elementary Schools have been regularly inspected, and have been kept in fair sanitary condition. Those at Christ Church Schools and St. Peter's Schools require total reconstruction. The sanitary conveniences at the Harvey Grammar School have been totally reconstructed, and the school yard at this school and the Wesleyan School have been repaved with ashphalte paving.

The various allotment gardens where there are a number of piggeries have been regularly inspected, to ensure cleanliness of the piggeries, and to prevent large accumulations of manure.

Stables, Mews, &c.

The inspection of the various Stables and Mews has entailed a considerable amount of work in my department, so as to ensure the prompt removal of all dung and other offensive matters. This is urgently necessary as the rooms over a large number of the Mews, are used for human habitation. It was necessary to serve eighteen notices for the removal of accumulations of dung, these have been promptly complied with except in a few instances during harvest time, when the farmers could not remove it as promptly as at other times. Owing to the outbreak of Glanders among the horses at one Stable, two horses were ordered to be slaughtered by the authority, which was done and the carcases buried in quick-lime. The woodwork, mangers, and other matters likely to retain infection were destroyed, and compensation amounting to £18 0s. 3d. was paid. The stables were thoroughly disinfected and cleansed. These stringent measures resulted in the disease being stamped out. Sanitary defects were found at Stables in Christ Church Road, at Bartholomew's Albion Mews, Marine Parade Stables, 6, Ingles Mews and 6, Albion Mews. The various defects found were remedied on notice being served.

Public Baths.

The number of male and female bathers at the Public Baths has increased during the past year, the numbers will be shewn in table IV at the end of this report. The new hot water system continues to give satisfaction. Four of the men's baths have been converted into First Class Baths, and two additional baths have been provided on the Ladies' side as First Class Baths, and these we find are greatly appreciated by the public. The Well at the Baths has been made deeper, which is now yielding a large increase of water, and I hope the Well will now yield sufficient for our purposes, as it will effect a saving of about £45 per annum.

Dairies, Cowsheds and Milkshops.

There are four registered Cowsheds in the Borough, thirteen registered Dairies and forty Purveyors of Milk. The Dairies and Cowsheds have been regularly inspected, and also the premises of the Purveyors of Milk, and have been found generally to be kept in a clean condition. I have also inspected a large number of Churns at the Railway Stations. In the case of Broadmead Manor Dairy, the paving was found defective, and was relaid with cement concrete on request to the occupier. The Cowsheds at Broadmead Farm were also repaved. As directed by the Committee and the Medical Officer of Health, I took fifty-six samples of milk from the various sources of supply and sent them to the Clinical Research Association for examination for Tubercle Baccilli. All these samples were found to be fairly satisfactory, and will be fully reported on by the Medical Officer of Health.

Housing of the Working Classes Acts.

Under section thirty-two of the Housing of the Working Classes Act, 1890, joint representations have been made by the Medical Officer of Health and myself, that sixteen houses in the Borough were, in our opinion, unfit for human habitation. Proceedings were taken before the Borough Bench to obtain Closing Orders with respect to eleven houses in the Narrows Cottages and 48, Radnor Street, and I regret to state that the Bench declined to make Closing Orders, although these houses are the worst in the town. With respect to the four houses, 3, 4, 5 and 6, Folly Cottages these are to be inspected by the Committee, before Closing Orders are applied for.

Infectious Disease.

Sixty-eight cases of infectious disease have been removed to the Sanatorium for treatment during the past year. Of these sixty-six belonged to Folkestone, one from Sandgate, and one from Hawkinge.

During the past year sixteen houses have been disinfected where cases of phthisis occurred.

Thirty-seven loads of bedding representing 967 articles, have been disinfected in the steam disinfecting apparatus at the Sanatorium, exclusive of articles belonging to the Sanatorium.

Food Inspection.

Regular inspections have been made of the Fishmongers and Fruiterers Shops, Stalls and Barrows, also Butchers Shops, Slaughterhouses, Fishmarket and other places, where food was prepared or sold. On February 27th, a carcase of beef was inspected at Broadmead Manor Farm by the Medical Officer of Health and myself and found unfit for human food, and it was destroyed with the consent of the owner. On June 25th I inspected 1½ tons of mackerel which were unfit for the food of man, and were destroyed with the consent of the owner, and on September 21st., I inspected a hind quarter of beef (129 lbs.) at the Beef Stores, Bradstone Road, on September 27th, 41lbs. of beef and on October 3rd, 115lbs. of beef, which were unfit for the food of man, and these were destroyed with the consent of the owner. On October 31st. I inspected the carcase of a pig at Messrs. Eastman's, High Street, and found it unfit for the food of man, this was also destroyed with the consent of the owner. On December 7th, I seized 5 pails of whiting, deposited for the purpose of sale at the Fishmarket, they were also inspected by the Medical Officer, and condemned as unfit for the food of man by a Magistrate, and were destroyed. Proceedings were commenced against the owner, but as he gave a false name and address the summons could not be served on him.

Slaughter Houses.

The Slaughter-houses in the Borough have been regularly inspected, so as to ensure cleanliness and prompt removal of all offal.

The yearly licence of the only licensed Slaughter-house in the Borough, has again been renewed. The new Slaughter-house Bye-laws have come into force, and I have served a copy of the Bye-laws on each of the occupiers of Slaughter-houses.

Common Lodging Houses.

The Common Lodging Houses, four in number, have been periodically inspected, to ensure cleanliness and compliance with the Bye-laws. We found that for some time, that water cress vendors were in the habit of storing their water-cresses in improper parts of the Common Lodging Houses, this practice has now been prohibited. In one Common Lodging House it was found necessary to reconstruct the drains which were found defective.

Port Sanitary Authority.

I have inspected 128 vessels arriving in the Port from English Ports, chiefly coal-laden, and a few timber laden, and have made thirty-three inspections of vessels arriving from Foreign Ports, being ice, timber, or granite laden. It is satisfactory to note that no infectious disease was introduced into the Borough during the past year by shipping.

Sale of Food and Drugs Acts.

During the past year I have purchased 100 samples of food, of which six were samples of milk supplied to the Sanatorium, and have submitted the same to the Public Analyst for analysis. Of the total samples ten were adulterated (including those adulterated with Boracic Acid), of these five were milk and five of other foods. I submit in table form the periods when the samples were taken and the result of analysis, and also the result of proceedings taken. The percentage adulteration is slightly less than in the previous year, being 5·0, against 5·6. The percentage of samples adulterated with Boracic Acid (milk samples) was 8·62. One sample contained fat as low as 2·18, or a deficiency of twenty-seven per cent. Proceedings where taken against the vendor of this sample and a conviction obtained.

Bakehouses.

There are thirty-six Bakehouses in the District, and these have been regularly inspected, and kept in a clean condition. It was found necessary to report the continued usage of an underground Bakehouse, which had been previously closed, as a certificate of fitness could not be granted to it. The owner was ordered to be cautioned, and I have not found it being used on my subsequent inspections. It was found necessary to serve notices on two occupiers of Bakehouses, to limewash the walls and ceilings. I have also inspected the various restaurants and kitchens, where food was prepared or sold and I find that there has been a great improvement in the cleanliness of these places, compared with previous years.

Sanitary Certificates.

One hundred and twenty sanitary certificates have been granted or renewed during the past year, and of these about 75 per cent. are renewals. This system continues to be appreciated by the public, and it is stated on the certificate, whether the smoke or water test has been applied, so that the applicant can attach his own value to the test applied.

Factory and Workshops.

There are nineteen registered Factories, 203 Workshops, and sixty-seven domestic workshops or outworkers on the register at the present time. These include twenty-two Hand-laundries, and two Mechanical Laundries. Two Dressmakers' workrooms and one Milliners' workroom were found overcrowded. One Dressmaker's workroom found in dirty condition. W.C. was found in dirty condition at one Tailor's workshop. Dirty walls and ceilings at one

Tailor's workshop. Foul W.Cs. at two Builders' yards, and one foul W.C. at Printer's works. Nearly all these defects were promptly remedied on verbal request or notice.

On behalf of the Medical Officer of Health, I gave notice to His Majesty's Inspector of Factories, that in four cases I had found young persons employed, without an Abstract of the Factory and Workshop Act being posted up in the room.

I am,
Your Obedient Servant,
JOHN PEARSON, Assoc. San., Inst.,
Sanitary Inspector.

Table 1.

Nuisance dealt with and abated during the year.

104	Houses redrained (single drains.)
11	Houses redrained (combined drains.)
46	Drains or soil-pipes ventilated.
21	Long hopper W.C. basins removed.
14	Flushing cisterns fixed.
32	Sink wastepipes cleaned, trapped and repaired.
51	Yard and scullery pavings repaired.
31	Blocked drains and W.C cleared.
4	Bath wastepipes trapped.
41	Defective roofs, gutters, etc.
3	Pan W.C's. removed.
5	"D" traps removed.
18	Foul accumulations removed.
30	Flushings cisterns repaired.
6	Dirty tenements cleaned.
3	Latrines cleaned.
8	Damp walls rendered dry.
72	Dust bins provided.
3	Larger flush pipes fixed to W.Cs.
22	Defective sinks removed.
16	Downspouts trapped, etc.
26	Storage tanks removed.
11	Leaky W.C's. repaired (leak just below trap.)
1	Defective gully repaired.
1	Branch drain relaid.
6	Lavatory wastepipes trapped.
14	Drain or soil-pipe ventilators repaired.

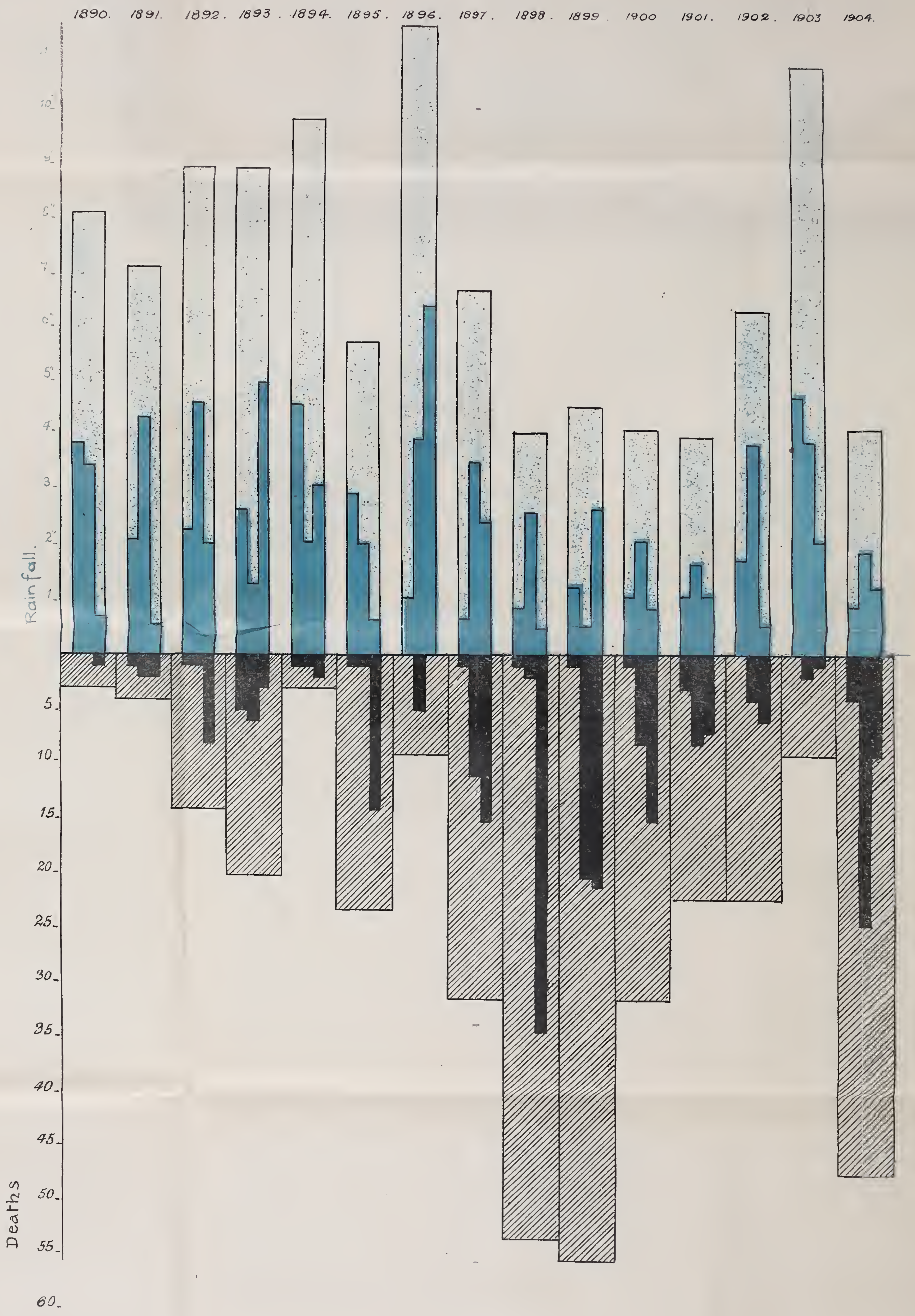
14	Defective W.C's. repaired or improved.
2	Gullies removed to open air.
3	Defective floors relaid.
3	Soil-pipes taken outside.
10	W.C. basins cleansed.
4	Walls and ceilings repaired.
11	Fowl houses removed or cleansed.
6	Bell and tongue traps removed.
2	Foul ponds cleansed.
4	Overcrowded houses.
2	Floors ventilated.
3	Stables limewashed.
60	Manholes constructed (includes those on drains relaid.)
1	Floor repaired or relaid.
3	Drains repaired.
4	Animals removed.
2	Cowsheds limewashed.
8	Miscellaneous.

DIARRHŒA DIAGRAM. 1890 TO 1904. Nº 2.

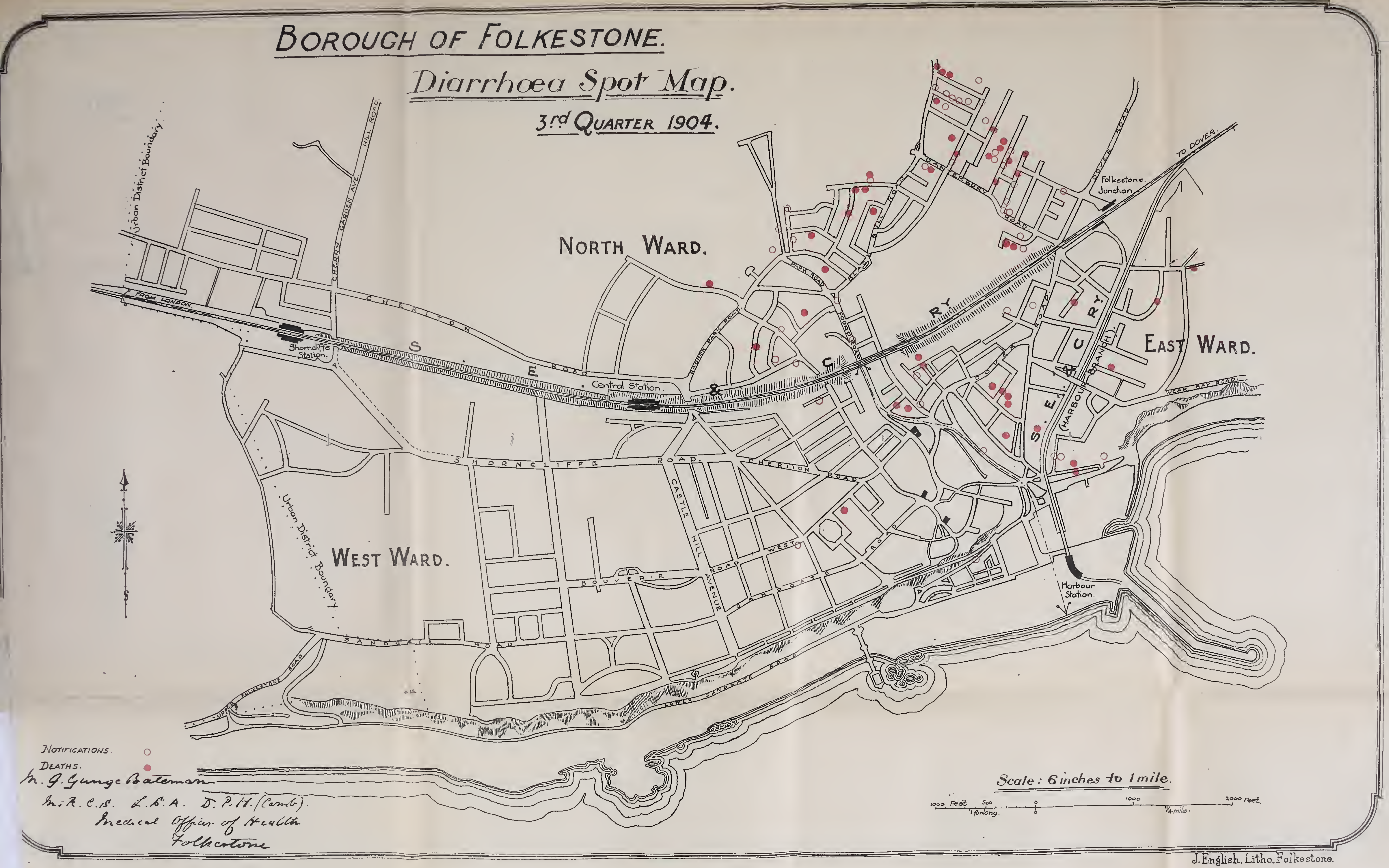
NOTE.

Monthly Rainfall indicated thus ■
Quarterly " " "
Annual Deaths " " ▨
Monthly " (3rd quarter only) " ■

RAINFALL.
3rd QUARTER IN EACH YEAR
DEATHS
DURING WHOLE YEAR.



M. G. Gunge Bateman
M.R.C.S. L.S.A. D.P.H. (Camb).
Medical Officer of Health
Folkestone



BOROUGH OF FOLKESTONE.

Diarrhoea Spot Map.

3rd QUARTER 1904.

NOTIFICATIONS. ○

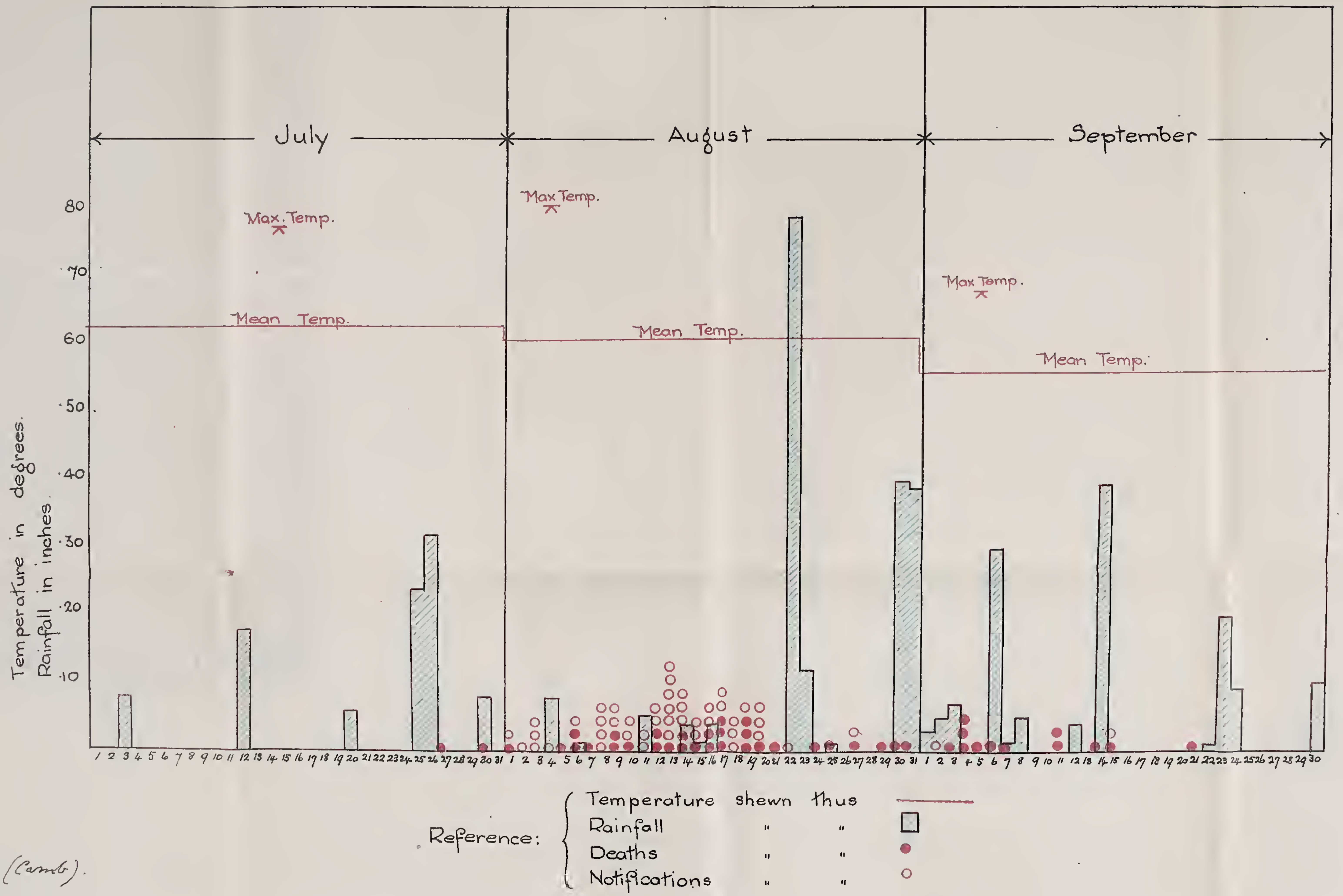
DEATHS. ●

M. G. Grange Bateman
M.R.C.S. L.S.A. D.P.H. (Camb).
Medical Officer of Health
Folkestone

J. English, Litho, Folkestone.

DIARRHŒA DIAGRAM.

Third Quarter, 1904.



G. George Bateman
M.R.C.S. L.S.A. D.P.H. (Camb).
Medical Officer of Health
Folkestone

J. English.

Table II.

Foods and Drugs purchased during 1904.

DATE.	DESCRIPTION.	RESULT.	REMARKS.
Jan. 28th	3 New Milks	All Genuine	Boracic Acid absent in all the samples.
,, ,,	2 Butters	Both Genuine	
,, ,,	1 Cinnamon	Genuine	
,, ,,	1 Lard	Genuine	
,, ,,	1 Salmon and Shrimp Paste	No Adulterants	Contain a trace of Boracic Acid
,, ,,	1 Turkey and Tongue Paste	No Adulterants	Contains a mere trace of Boracic Acid.
,, ,,	1 Marrowfats	Contains 0·0395 per	cent of Copper Sulphate.
,, ,,	1 Margarine	Genuine	
,, ,,	1 Whisky (Irish)		
Jan. 29th	3 New Milks	Genuine	Boracic Acid absent in all the samples.
March 26th	5 New Milks	Genuine	
,, ,,	3 Butters	Genuine	
,, ,,	1 Raspberry Jam	Genuine	
,, ,,	1 Greengage Jam	Genuine	
March 27th	5 New Milks	4 Genuine	One sample slightly below standard in fat.
March 28th	1 Whisky (Scotch)		
March 30th	2 New Milks	Both Genuine	
May 20th	4 New Milks	All Genuine	
,, ,,	2 Butters	Both Genuine	
,, ,,	1 Cheese	Genuine	
,, ,,	1 Margarine	This sample has a	slight excess of water.
May 21st	5 New Milks	4 Genuine	One sample a little below standard limit as regards fat.
July 13th	7 New Milks	6 Genuine	One sample contained a small amount of Boracic Acid.
		Proceedings taken	against Vendor. Case dismissed
,, ,,	1 Condensed Milk	Genuine	287 parts of real milk represented by 100 parts of sample.
,, ,,	3 Butters	Genuine	
Aug. 20th	2 New Milks	Both Genuine	
,, ,,	2 Creams	Both contain Bora	cic Acid equivalent to 56 grains and 23 grains per pint respectively.
,, ,,	1 Butter	Genuine	
,, ,,	1 Condensed Milk	Genuine	315 parts of real milk represented by 100 parts of sample.
,, ,,	1 Lard	Genuine	
,, ,,	1 Raspberry Jam	Genuine	
,, ,,	1 Sausages	Contains Boracic	Acid equivalent to 32·5 grains per pound (avoirdupois.)
Aug. 21st	6 New Milks	All Genuine	No Boracic Acid present.
Oct. 29th	6 New Milks	All Genuine	Boracic Acic was not detected in any of the samples.
,, ,,	4 Butters	All Genuine	
,, ,,	2 Margarines	Both Genuine	One sample sold contrary to the provisions of the Act. Vendor fined 10/- and 30/- costs.
Dec. 17th	10 New Milks	8 Genuine	One sample contained Boracic Acid to the extent of 3·8 grains per pint. One sample was deficient in fat to the extent of 27 per cent. Vendor fined 20/- and 34/- costs.
,, ,,	3 Butters	Genuine	
,, ,,	1 Lard	Genuine	
,, ,,	1 Flour	Genuine	
,, ,,	1 Cheese	Genuine	

Table III.

FOLKESTONE.

Disease.	Male.	Female.	Adult.	Child.	Total.
Scarlet Fever	20	17	7	30	37
Diphtheria	8	16	3	21	24
Typhoid Fever	2	2	3	1	4
Measles	—	1	1	—	1

SANDGATE.

Diphtheria	—	1	1	—	1

HAWKINGE.

Diphtheria	—	1	1	—	1

Total for all—68

Public Baths.—Table. IV.

Month.		1st week M	1st week F	2nd week. M	2nd week. F	3rd week. M	3rd week. F	4th week. M	4th week. F	5th week M	5th week F	Totals.	
January.		92	22	257	79	251	102	261	83	251	121	1112	407
February		231	86	273	76	250	101	317	93			1071	356
March		222	78	279	108	275	114	341	134	280	107	1397	541
April		371	170	415	178	434	148	407	149			1627	645
May		386	149	337	136	509	218	468	179			1700	682
	6d.							14				14	
June		413	191	397	204	482	269	537	268			1829	932
	6d.	38		40		55		47				180	
July		435	263	479	252	622	331	542	350	494	376	2572	1572
	6d.	67		109		58		81		79		394	
August		522	412	384	386	470	441	417	360			1793	1599
	6d.	67		83		68		75				293	
September		508	339	352	261	414	277	399	250	359	204	2032	1331
	6d.	52		62		46		44		29		253	
October		317	131	276	136	321	186	353	141			1267	594
	6d.	18		29		28		18				93	
November		279	151	279	138	272	126	224	114			1054	529
	6d.	24		26		27		15				92	
December		195	92	255	107	318	138	235	69			1003	406
	6d.	20		25		35		9				89	
Totals, 2d. Baths												18457	9594
Total, 6d. Baths												1408	
Grand Total												29459	

Each weekly column of figures is divided into two sub-columns. The first column gives the number of males using the baths, and the second the number of females. The number of bathers is 7,770 more than in 1903.